Application No.: 09/500,747 Docket No.: 300622004600

SPECIFICATION AMENDMENTS

Please replace the paragraph on page 5, line 14-page 6, line 3, with the following rewritten paragraph:

PCT publication WO 98/49315, the contents of which are incorporated herein by reference, describes an approach for modifying the enzymatic activities included within modules of a PKS by maintaining the scaffolding intact but replacing catalytic domains with different catalytic domains. U.S. Serial No. 09/346,860 filed 2 July 1999, now U.S. patent 6,221,641, and the corresponding PCT publication WO 00/01838, also filed on that date, and incorporated herein by reference describe alternative methods by altering the hypervariable region of the AT domains so as to alter the specificity for an extender unit and alteration of the KS domains to control stereochemistry. The present invention takes advantage of the approach of manipulating modules so that the catalytic activities of an entire module are placed in the appropriate sequence to construct a desired polyketide. The ability to utilize this approach depends on effecting an appropriate means for the module to incorporate a growing polyketide chain, which involves assuring that an appropriate linker region is included. Since the filing of the provisional application from which the present application claims priority, a related paper has been published by Ranganathan, A., et al., Chem. & Biol. (1999) 6:731-741. In this paper, intrapolypeptide linkages are fortuitously supplied to chimeric modules by including the KS region of the native downstream module in a chimera between the corresponding upstream module and the portions downstream of the KS domain in a heterologous module. Alternatively, the downstream module will include the ACP catalytic domain of the native upstream module fused to the remainder of a heterologous module upstream in the chimera.

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Please replace the paragraph on page 13, lines 5-12, with the following rewritten paragraph:

A preferred starter unit for such an assembly of modules is a diketide thioester either formed in situ by including a module which contains a loading domain to incorporate a starter unit along with an extender unit to attain this resultant, or the diketide may be synthesized independently and used as the substrate for the PKS. The synthesized diketide may be supplied as the thioester, such as the N-acylcysteamine thioesters. Preparation methods for these thioesters are described in the above-referenced U.S. Serial No. 09/346,860 filed 2 July 1999, now U.S. patent No. 6,221,641, and the corresponding PCT application, as well as U.S. Serial No. 09/492,733 (Atty. docket No. 30062-20032.00) filed 27 January 2000, now U.S. patent No. 6,492,562 B1.

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